

WHAT IS CLAIMED IS:

1. A method for processing data comprising:
receiving data at a cache server;
receiving an expiration command at the cache server from
5 a remote client; and
marking the data as expired in response to the expiration
command.

2. The method for processing data according to Claim 1
further comprising:
receiving a data request at the cache server from a
remote computer, the data request requesting data from the
cache server;
determining whether the requested data is available at
15 the cache server;
retrieving the requested data from an origin server when
the requested data is unavailable; and
communicating the requested data from the cache server to
the remote computer.

3. The method for processing data according to Claim 2
wherein the data comprises a web page and further comprising
generating the web page at an origin server.

25 4. The method for processing data according to Claim 3,
wherein generating the web page comprises generating the web
page based on the data request.

5. The method for processing data according to Claim 2, wherein determining whether the requested data is available comprises:

determining whether the requested data is present at the
5 cache server; and

determining whether the requested data is current when the requested data is present at the cache server.

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6. The method for processing data according to Claim 2, wherein retrieving the requested data comprises controlling, by the flow control server, retrieval by the cache server of the requested data from the origin server.

7. The method for processing data according to Claim 6, wherein controlling retrieval comprises:

determining at the flow control server a current load associated with the origin server;

prioritizing at the flow control the requested data; and

determining when the cache server retrieves the requested
20 data based on the current load and the priority of the requested data.

8. The method for processing data according to Claim 7, wherein determining whether to grant permission comprises:

25 granting permission to the cache server when the current load is below a predetermined threshold; and

denying permission to the cache server when the current load exceeds the predetermined threshold.

9. The method for processing data according to Claim 1 wherein the remote client comprises a data center manager and further comprising generating the expiration command at the data center manager in response to a change in the data and communicating the expiration command from the data center manager to the cache server.

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10 10. The method for processing data according to Claim 9 further comprising generating the expiration command at the data center manager in response to the elapsing of a predetermined period of time.

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15 11. The method for processing data according to Claim 9, wherein generating the expiration command comprises:
detecting a change in the data associated with the origin server by a trigger associated with the data;
generating a data change command indicating at least one changed item of content; and
communicating the data change command to the data center manager.

20 12. The method for processing data according to Claim 1, wherein the remote client comprises a data center manager and wherein marking the data as expired comprises receiving the expiration command from the data center manager and determining the data to expire as a function of the expiration command.

25 13. The method for processing data according to Claim 12, wherein the expiration command expires a single web page.

14. The method for processing data according to Claim 12, wherein the expiration command expires a plurality of web pages.

5 15. The method for processing data according to Claim 12, wherein the expiration command expires a plurality of web pages at a plurality of web sites.

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10 16. The method for processing data according to Claim 12, wherein the expiration command expires a plurality of web pages at a plurality of domains.

17. The method for processing data according to Claim 12 further comprising:

15 receiving at the data center manager a data change message from a trigger associated with a data source, the data source associated with an origin server; and

20 generating the expiration command at the data center manager as a function of the data change message.

25 18. The method for processing data according to Claim 1, wherein the data comprises a web page using the hypertext markup language.

19. The method for processing data according to Claim 1, wherein the expiration command comprises an Internet Cache Synchronization Protocol command.

20. The method for processing data according to Claim 19, wherein the remote computer comprises a data center manager and wherein the expiration command comprises an Internet Cache Synchronization Protocol terse command and
5 further including generating the expiration command at the data center manager in response to an Internet Cache Synchronization Protocol verbose command.

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21. The method for processing data according to Claim 1, wherein the data has an associated request element identifying the data, the request element having a first portion and a second portion distinct from the first portion and wherein receiving data at the cache server comprises:

filtering the first portion of the request element based on predetermined criteria associated with an origin server associated with the data; and

identifying the data based on the second portion of the request element.

22. The method for processing data according to Claim 21 further comprising:

receiving a request at the cache server, a first portion of the request being distinct from the first portion of the request element and a second portion of the request being
25 substantially similar to the second portion of the request element; and

retrieving the data as a function of the second portion of the request and the second portion of the request element.

30 23. The method for processing data according to Claim 22, wherein the request element comprises a uniform resource locator and the request comprises a uniform resource locator.

24. A method for providing efficient data access service comprising:

subscribing an origin server to a data center;

routing a data request from a browser to the data center,
5 the data request requesting a dynamic content item and having
an associated address indicating the origin server;

determining whether the dynamic content item is available
at the data center;

generating the dynamic content item at the origin server
when the dynamic content item is unavailable at the data
center;

retrieving the dynamic content item from the origin
server when the content item is unavailable at the data
center; and

communicating the dynamic content item to the browser.

25. The method for providing efficient data access
service according to Claim 24, wherein subscribing the origin
server comprises transferring domain name resolution service
to the data center and wherein routing the data request
comprises resolving the address associated with the origin
server.

26. The method for providing efficient data access
25 service according to Claim 24, wherein determining whether the
dynamic content item is available comprises:

determining whether the dynamic content item is present
at the data center; and

determining whether the dynamic content item is current
30 when the content item is present at the data center.

27. A system for processing data comprising:
a data center operable to receive a request from a client; and
a data center manager coupled to a data source and the
5 data center, the data source operable to generate a data change message, and the data center manager operable to receive the data change message and generate an expiration message therefrom.

28. The system for processing data according to Claim 27, wherein the data center comprises a web server, a cache server and a flow control server.

29. The system for processing data according to Claim 28, wherein the web server is operable to receive the request from the client, wherein the cache server is operable to store data received from the origin server and wherein the flow control server is operable to prioritize the request and control the cache server.